

III. ACCOUNTABILITY AND EVALUATION

A. Program Requirements

1. Describe the procedures employed to include input from eligible recipients in establishing the core indicators of performance [Sec. 113(b)(1)(A) and Sec. 113(b)(2)(D)].

The State of Missouri developed a strategy for eligible recipients to provide input in establishing the performance measures for the core indicators. This strategy included consultations with vocational education organizations, vocational administrators and staff, as well as the public.

The State held six (6) regional public hearings to discuss all aspects of the new Act to solicit input from the attending practitioners regarding what specific performance measures would be used for each performance indicator. The State consulted with the Missouri Association for Career and Technical Education membership at the Summer, 1999 conference. This conference was attended by over three thousand 3000 members of the organization, which included administrators, teachers, counselors, placement staff and other professionals in the field of vocational education.

The State consulted with the Missouri Council of Vocational Administrators at their Fall of 1998 and 1999 conferences. This group includes area vocational school directors, community and technical college deans and representatives, with a membership of approximately three hundred (300).

The Office of Social and Economic Data Analysis, and the Practical Arts and Vocational-Technical Education Department, both at the University of Missouri – Columbia, were consulted to provide information. These meetings were held primarily to receive input regarding the core indicators for academic and vocational skills attainment.

Small group sessions were held with eligible recipients throughout 1999 to establish the core indicators of performance for the State. Each session addressed specific data sources, which could be used to measure each core indicator and the ability of this data to meet the requirements of the Act. The capability of the eligible recipients to collect and report the data was discussed extensively.

Representatives from Missouri participated in the national pilot project with seven other states to clarify the core indicators of performance and establish definitions, a framework for each core indicator and the guidelines to be used by states to establish performance measures. These series of meetings provided invaluable information, which Missouri shared with local education agencies and other entities assisting the State in establishing performance measures.

2. Describe the procedures employed to include input from eligible recipients in establishing a State level of performance for each core indicator of performance. [Sec. 113(b)(1)(C), Sec. 122(C)(9)].

The State established the levels of performance for each performance indicator in consultation with the many of the same eligible recipients described in Section 1. The levels of performance was based on two (2) critical factors: (1) The ability of the data to clearly measure the indicators of performance, and (2) The capability of the local education agencies to collect and report the data.

The State consulted with individuals and small groups representing local education agencies to determine what data could be used to measure performance and to determine whether or not there was sufficient baseline data to establish levels of performance. These entities provided the State with a clear insight into the data available from existing sources, as well as what new data and reporting systems would be necessary to meet the four core indicators of performance.

The most significant information received during the consultations concerned the vast differences in the ability of local education agencies to collect and report the necessary data. Most local education agencies would have to develop an entirely new data collection and reporting system. This requirement was necessitated by the definitions formulated for the student populations to be included in State and Federal reporting systems. Existing data collection and reporting systems range from a totally manual system that would include transcript analysis, classroom headcounts and written tabulations, to highly sophisticated computer information systems which track all student characteristics necessary to meet all State and Federal reporting requirements.

A workshop was held for representatives of thirty-eight (38) comprehensive high schools in January, 2000, to discuss the levels of performance and the ability of the schools to collect the necessary data. The group was composed of high school principals, counselors, and placement coordinators. Each of these participants represented a local education agency that was an eligible recipient under Perkins III.

A meeting was held in February, 2000, with representatives of local education agencies to finalize the levels of performance for each of the core indicators. This two-day meeting resulted an agreement on performance measures and levels of performance contained within the State Plan.

3. Describe the procedures employed to include input from eligible recipients in establishing any additional indicators of performance identified by the eligible agency. [Sec. 113(b)(1)(B)].

During the meetings described in Number one (1) above, the eligible recipients were asked for any additional indicators of performance which might be included in the State Plan. The response from these eligible recipients was that since the state already has other performance measures such as the standards included in the Missouri School Improvement Program (MSIP) and the Effectiveness Index Formula, that no additional indicators of performance was necessary. The consensus of these groups was that the State should concentrate on achieving high levels of performance on the four required core indicators.

4. Describe the procedures employed to include input from eligible recipients in establishing State levels of performance for each additional indicator of performance. [Sec. 113(b)(1)(C)].

Since consultations with the eligible recipients regarding additional performance measures resulted in the decision not to include additional measures, there was not further discussion regarding levels of performance as required by Section 113(b)(1)(C).

5. Identify and describe the core indicators to be used to meet the requirements of Section 113. [Sec.113(b)(2)(A)(I-iv); and
6. Identify and describe a State level of performance for each core indicator of performance for the first two program years covered by the State Plan. [Sec.113(b)(3)(A)(ii)].

CORE INDICATOR 1 – ATTAINMENT			
Sub-Indicator 1S1 – Secondary Academic Attainment			
Measure	Measurement Approach	Baseline Data	Level of Performance
<p><u>Numerator:</u></p> <p>The number of vocational education concentrators that score in the top three (3) levels of achievement of the Missouri Assessment Program (MAP) in the four core areas of mathematics, communication arts, science and social studies.</p> <p><u>Denominator:</u></p> <p>The total number of vocational education concentrators taking the Missouri Assessment Program (MAP) in the reporting year</p>	<p>The Missouri Assessment Program (MAP) is a State developed academic assessment system with specified levels of performance for all elementary and secondary school districts. The MAP contains seventy-three (73) state-adopted rigorous academic performance standards.</p> <p>*See Note 1S1-1.</p>	<p>The baseline data used will be the total number of tenth grade and eleventh grade students taking the MAP from FY1998 and FY1999. The vocational completers exiting in the year 2000 will have only taken the mathematics portion of the MAP (the first non-pilot year).</p> <p>*See Note 1S1-2 for the table containing baseline data for years 1998 and 1999 in the four core areas.</p>	<p>The percent of vocational education concentrators scoring in the top three (3) achievement levels of the MAP will be equal to or greater than fifty percent (47%) of the total number of vocational education concentrators taking the MAP.</p>

INDICATOR 1S1 – NOTES:

- 1. The State of Missouri implemented a performance-based assessment system used by all public elementary and secondary schools in the State. The Missouri Assessment Program (MAP) was an education reform mandated by the Outstanding Schools Act of 1993. The Missouri State Board of Education directed the Department of Elementary and Secondary Education to identify the knowledge, skills and competencies that Missouri students should acquire by the time they complete high school, and to assess student progress toward those academic standards. Through the collaborative efforts of teachers, including vocational education teachers, school administrators, parents and business professionals throughout the state, the Missouri Show-me Standards were developed. These seventy-three (73) Show-Me Standards established rigorous academic performance standards for all Missouri students. The Department also worked with teachers, including vocational education teachers, to develop the Missouri Assessment Program (MAP), an assessment system to evaluate student proficiency, based on the Missouri Show-Me Standards.**

The MAP includes Mathematics Assessments for Grades 4, 8, and 10; Communication Arts Assessments for Grades 3, 7, and 11; Science Assessments for Grades 3, 7, and 10; and Social Studies Assessments for Grades 4, 8, and 11. The assessment requires three hours of test administration time and includes three types of test items: multiple choice, constructed response and performance events.

Multiple Choice: These items present students with a question followed by four or five response options, one of which is correct. The advantages of these items are: 1) they are effective in measuring a student's breadth of content knowledge; and 2) a large number of these items can be administered and scored in a short amount of time. The major limitation is that they do not adequately measure student's ability to apply what they know.

Constructed Response: This component requires students to supply (rather than select) an appropriate response. Students are asked to provide a one-word answer, complete a sentence or show their work in solving a problem. In addition to measuring students' content knowledge, constructed response items can provide information about how students arrive at their answers. These items are more time consuming than multiple-choice items to administer and score; however, they provide more information about student's understanding and thinking.

Performance Events: The performance events measure students knowledge, and their ability to apply that knowledge in problem situations. Performance events require students to work through a complex problem or present a written argument. Performance events often allow for more than one approach to arrive at a correct answer. This type of assessment provides insight into a student's ability to apply knowledge and understanding.

Student performance is reported in terms of five levels of achievement that describe a pathway to proficiency. Each achievement level represents standards of performance for each content area assessed in Mathematics, Communication Arts, Science and Social Studies.

Achievement Level scores provide a description of what students can do in terms of the content and skills assessed. The achievement levels, ranging from lowest to highest, are: Step 1, Progressing, Nearing Proficient, Proficient and Advanced.

All vocational education concentrators will take the Missouri Assessment Program (MAP) test in either the 10th or 11th grade for all four core subject areas. MAP data will be available for all vocational education participants, concentrators and completers beginning with the Spring, 2000 test. This data will have to be collected from the local education agencies and must be derived from either local instructional management systems or a transcript analysis.

The baseline data for the performance measures will use the first two full years of MAP data, and in some instances one field test year, for all Missouri students in the four core academic areas. MAP data is available for all of the required disaggregated populations with the exception of: individuals in nontraditional training; single parents, including single pregnant women; and displaced homemakers. This data will be reported by the local education agency in their annual report to the Department of Elementary and Secondary Education.

2. The following table describes the Missouri Assessment Program (MAP) results for years 1998 and 1999 for all Missouri students. The number of vocational education concentrators scoring in the Advanced, Proficient and Nearing Proficiency levels, are included in the state performance numerator. The total number of vocational education concentrators taking the MAP each year will be the denominator. The resulting dividend must be at least fifty percent (47%). This will constitute high achievement for Standard 1S1. Local education agencies scoring below the high achievement level must demonstrate improvement of at least three percent (3%) each year in order to meet the established state standards for performance.

MATHEMATICS (Grade 10)	*FY1997	FY1998	FY1999	TOTAL
Students in Top Three Levels on MAP	10,296	19,150	22,668	41,818
Total Students Taking the MAP	30,023	54,744	59,439	114,183
Percent in Top Three Levels	35%	35%	39%	37%
SCIENCE (Grade 10)		*FY1998	FY1999	TOTAL
Students in Top Three Levels on MAP		16,730	27,747	44,477
Total Students Taking the MAP		39,656	59,012	98,668
Percent in Top Three Levels		43%	47%	45%
COMMUNICATION ARTS (Grade 11)		*FY1998	FY1999	TOTAL
Students in Top Three Levels on MAP		19,660	30,582	50,242
Total Students Taking the MAP		34,645	49,582	84,227
Percent in Top Three Levels		57%	62%	60%

SOCIAL STUDIES (Grade 11)		FY1998	*FY1999	TOTAL
Students in Top Three Levels on MAP		NA	20,906	20,906
Total Students Taking the MAP		NA	38,475	38,475
Percent in Top Three Levels		0%	55%	55%
ALL SUBJECTS	*FY1997	FY1998	FY1999	TOTAL
Students in Top Three Levels on MAP	10,296	55,540	101,903	167,739
Total Students Taking the MAP	30,023	129,045	206,508	365,576
Percent in Top Three Levels	35%	43%	50%	46%

*Field Test Year

CORE INDICATOR 1 – ATTAINMENT			
Sub-Indicator 1S2 – Secondary Vocational and Technical Skills Attainment			
Measure	Measurement Approach	Baseline Data	Level of Performance
<p><u>Numerator:</u></p> <p>The total number of vocational education concentrators that master eighty percent (80%) of the State identified, industry validated and locally adopted essential skills.</p> <p><u>Denominator:</u></p> <p>The total number of vocational education concentrators.</p>	<p>All State-approved vocational and technical education programs are required to have a competency-based curriculum, with an assessment system for measuring mastery of identified competencies. Student mastery of identified competencies must be recorded in an Instructional Management System (IMS). The local education agency will report to the State the total number of students, by vocational program, the total number of competencies for each program, and the number of competencies mastered by all students enrolled.</p>	<p>The baseline data used will be the Essential Skills Reports completed by local education agencies for the past three years. This data is summarized in the chart below.</p>	<p>The percent of vocational education concentrators mastering eighty percent (80%) of the State identified, industry validated and locally adopted essential skills will be eighty-five percent (87%) or higher.</p>

Secondary Vocational and Technical Skills Mastery				
All Vocational Programs	FY1997	FY1998	FY1999	TOTAL
Number of Voc. Students	18,494	19,207	16,418	54,119
Number of Students Mastering 80% of Essential Skills	16,275	16,243	13,904	46,422
Percent of Students Mastering 80% of Essential Skills	88%	85%	85%	86%

CORE INDICATOR 1 - ATTAINMENT				
Sub-Indicator 1P1 – Post-secondary Academic Attainment				
Measure	Measurement Approach	Baseline Data	Level of Performance	
<p><u>Numerator:</u></p> <p>The number of postsecondary vocational education concentrators that score at the 55th percentile on a State approved, nationally developed academic assessment instrument.</p> <p><u>Denominator:</u></p> <p>The total number of vocational education concentrators taking the nationally developed academic assessment instrument.</p>	The State will provide the postsecondary institutions with a list of State approved, nationally developed academic assessment instruments. The postsecondary institutions will administer these assessments to all students identified as vocational concentrators.	Baseline data for postsecondary academic attainment has not been routinely collected by the State for vocational and technical education students.	The percent of vocational education concentrators scoring at or above the 55 th percentile on a State approved, nationally developed academic assessment instrument will be equal to or higher than fifty percent (47%).	
Postsecondary Academic Attainment				
All Core Academic Areas	FY1997-1999			
Total Number Vocational Students At or Above The National Mean	2760			
Total Number of Students Taking Test	5660			
Percent of Students Scoring At or Above National Norm	48.8%			

***Note: Based on a sampling of postsecondary institutions testing academic attainment using the College Assessment of Academic Proficiency (CAAP).**

CORE INDICATOR 1 - ATTAINMENT			
Sub-Indicator 1P2 – Postsecondary Vocational and Technical Skills Attainment			
Measure	Measurement Approach	Baseline Data	Level of Performance
<p><u>Numerator:</u></p> <p>The total number of postsecondary vocational education concentrators that master eighty percent (80%) of the State identified, industry validated and locally adopted essential skills.</p> <p><u>Denominator:</u></p> <p>The total number of vocational education concentrators.</p>	<p>All State-approved vocational and technical education programs are required to have a competency-based curriculum, with an assessment system for measuring mastery of identified competencies. Student mastery of identified competencies must be recorded in an Instructional Management System (IMS). The local education agency will report to the State the total number of students, by vocational program, the total number of competencies for each program, and the number of competencies mastered by all students enrolled.</p>	<p>The baseline data used will be the Essential Skills Reports completed by local education agencies for the past three years. This data is summarized in Chart 1 below.</p>	<p>The percent of vocational education concentrators mastering eighty percent (80%) of the State identified, industry validated and locally adopted essential skills will be eighty seven percent (87%) or higher.</p>

Postsecondary Vocational and Technical Skills Mastery				
All Vocational Programs	FY1997	FY1998	FY1999	TOTAL
Total Number of Vocational Students	2,175	1,728	2,027	5,930
Total Number of Students Mastering 80% of ES	2,038	1,634	1,901	5,573
Percent of Students Mastering 80% of Essential Skills	94%	95%	94%	94%

CORE INDICATOR 2 – COMPLETION			
Sub-Indicator 2S1 – Secondary Completion			
Measure	Measurement Approach	Baseline Data	Level of Performance
<p><u>Numerator:</u></p> <p>The total number of vocational education concentrators that complete secondary education or obtain a high school equivalency during the current reporting year.</p> <p><u>Denominator:</u></p> <p>The total number of vocational education concentrators that left secondary education in the reporting year.</p>	<p>The local education agencies will annually report the number of vocational education concentrators for the institution in the reporting year. Of the total number of concentrators, the local education agencies will report the number that complete secondary education or obtain a high school equivalency. High School graduation in Missouri is based on state-established graduation requirements.</p>	<p>The baseline data for completion will be established using the state-wide graduation rates for all high school students. Baseline data does not currently exist for vocational education concentrators. This data will be available following the first reporting year (FY2000). The graduation rates for the years FY1997, FY1998 and FY1999 are contained in the chart below.</p>	<p>The percent of vocational education concentrators that complete secondary education or obtain a high school equivalency will be at seventy-eight percent (78%) or higher</p>

Secondary High School Completion Rates				
All Secondary Students	FY1997	FY1998	FY1999	AVERAGE
Percent of All Secondary Students Completing High School	75.29%	77.50%	78.09%	76.96%

CORE INDICATOR 2 – COMPLETION			
Sub-Indicator 2S2 – Proficiency Credential with Secondary Diploma			
Measure	Measurement Approach	Baseline Data	Level of Performance
<p><u>Numerator:</u></p> <p>The total number of vocational education concentrators who receive a high school diploma or a high school equivalency and received a local, state or national credential, and exited secondary education during the reporting year.</p> <p><u>Denominator:</u></p> <p>The total number of vocational education concentrators receiving a high school diploma or a high school equivalency and exited secondary education during the reporting year.</p>	<p>The local education agencies will annually report the number of vocational education concentrators for the institution in the reporting year. Of the total number of concentrators, the local education agencies will report the number that receive a high school diploma or obtain a high school equivalency and receive a local, state or national credential that includes but is not limited to: license, certification, portfolio or other credential documenting proficiency.</p>	<p>The baseline data for proficiency credentials has not been collected or reported by local education agencies. No local or state data is currently available. The state will define what credentials are acceptable for this indicator and require local education agencies to begin collecting data during the FY2000 school year.</p>	<p>The level of performance will be the percent of vocational education concentrators who receive a high school diploma or a high school equivalency and received a local, state or national credential, and exited secondary education during the reporting period will be twenty-one percent (21%)</p>

CORE INDICATOR 2 – COMPLETION			
Sub-Indicator 2P1 – Postsecondary Degree or Credential			
Measure	Measurement Approach	Baseline Data	Level of Performance
<p><u>Numerator:</u></p> <p>The total number of vocational education completers receiving a postsecondary degree or credential during the reporting year.</p> <p><u>Denominator:</u></p> <p>The total number of vocational education completers that exited the postsecondary vocational education program during the reporting year.</p>	<p>The local education agencies will annually report the number of postsecondary vocational education completers receiving a postsecondary degree or credential and the total number of completers of a vocational education program for the reporting year.</p>	<p>The baseline data for attaining a degree, certificate, or other credential has not been reported by the local education agencies. Baseline data was established at the federal level and will be adjusted based on data collected during the FY2000 school year for all eligible postsecondary education agencies.</p>	<p>The percent of completers receiving a postsecondary degree or credential for the reporting year will be seventy-eight percent (78%).</p>

CORE INDICATOR 3 – PLACEMENT AND RETENTION					
Sub-Indicator 3S1 – Secondary Placement					
Measure	Measurement Approach	Baseline Data		Level of Performance	
<p><u>Numerator:</u></p> <p>The number of secondary vocational education completers placed in post-secondary education or advanced training, employment and/or the military service during the reporting year.</p> <p><u>Denominator:</u></p> <p>The total number of vocational education completers.</p>	<p>The local education agencies will report the total number of vocational education completers of a Department approved occupational vocational education program with a high school diploma or a high school equivalency. A follow-up will be conducted one hundred and eighty (180) days following the student’s exit from the program. This follow-up will be conducted by the local education agency following state-established guidelines.</p> <p>The local education agency will report the number of completers placed in postsecondary education or advanced training, employment and/or the military service for the preceding year.</p>	<p>Historical placement data is available for all occupational vocational education completers. This historical data will be used to establish the baseline for the level of performance for this indicator. See Chart below.</p>		<p>The number of secondary completers placed in postsecondary education or advanced training, employment and/or the military service will be at or greater than ninety-one percent (91%) of the total number of completers exiting secondary education.</p>	
Secondary Placement		FY1996	FY1997	FY1998	TOTAL
Number Students Exiting		25,698	23,516	23,807	73,021
Number Students Placed		22,740	21,350	21,751	65,841
Percent Placed		89%	91%	92%	91%

CORE INDICATOR 3 – PLACEMENT AND RETENTION				
Sub-Indicator 3P1 – Postsecondary Placement				
Measure	Measurement Approach	Baseline Data		Level of Performance
<p><u>Numerator:</u></p> <p>The number of postsecondary vocational education completers placed in post-secondary education or advanced training, employment and/or the military service during the reporting year.</p> <p><u>Denominator:</u></p> <p>The total number of postsecondary vocational education completers.</p>	<p>The local education agencies will report the total number of postsecondary vocational education completers that complete a Department approved occupational vocational education program and exits postsecondary education with a degree, certificate or other credential. A follow-up will be conducted one hundred and eighty (180) days following the student's exit from the program. This follow-up will be conducted by the local education agency following state-established guidelines. The local education agency will report the number of completers placed in postsecondary education or advanced training, employment and/or the military service for the preceding year.</p>	<p>Historical placement data is available for all postsecondary occupational vocational education students, but not specifically for completers as defined by the State. This historical data will be used to establish the baseline for the level of performance for this indicator. See Chart below.</p>		<p>The number of postsecondary completers placed in postsecondary education or advanced training, employment and/or the military service will be at or greater than ninety percent (85%) of the total number of completers exiting secondary education</p>
Postsecondary Placement	FY1997	FY1998	FY1999	TOTAL
Number Students Exiting	4,694	3,887	3,822	12,403
Number Students Placed	3,979	3,211	3,290	10,480
Percent Placed	85%	83%	86%	85%

CORE INDICATOR 3 – PLACEMENT AND RETENTION			
Sub-Indicator 3P2 – Postsecondary Retention			
Measure	Measurement Approach	Baseline Data	Level of Performance
<p><u>Numerator:</u></p> <p>The number of postsecondary occupational vocational education completers that were placed in employment during the current reporting year and retained in employment for a period of one year.</p> <p><u>Denominator:</u></p> <p>The total number of postsecondary vocational education completers placed</p>	<p>Missouri currently does not have a system to collect retention of postsecondary vocational education students beyond the one-hundred and eighty day (180) follow-up system. The use of a second survey of students has been determined cost prohibitive by the local education agencies required to complete the follow-up. A state-wide system is being developed which can utilize student-specific data such as social security numbers to access the Unemployment Insurance (UI) system.</p>	<p>No baseline data currently exists, nor does any local or state system exist in order to begin collecting the data. The State is currently researching the available data and reporting systems to develop a new measurement. The state will pilot a system using Statewide Job Placement Services files and cross-matching these files with the UI records through the University of Missouri Economics Department for FY2000.</p>	<p>The percent of postsecondary completers retained in employment for a period of one year after exiting vocational education will be ninety-one percent (91%).</p>

Postsecondary Retention	FY1997	FY1998	FY1999	TOTAL
Number Students Retained	4694	3887	3822	12403
Number Students Placed	3979	3211	3290	10480
Percent Retained	85%	83%	86%	85%

CORE INDICATOR 4 – PARTICIPATION IN AND COMPLETION OF NONTRADITIONAL PROGRAMS			
Sub-Indicator 4S1 – Participation in Secondary Nontraditional Programs			
Measure	Measurement Approach	Baseline Data	Level of Performance
<p><u>Numerator:</u></p> <p>Number of secondary students participating in underrepresented gender groups participating in nontraditional secondary occupational vocational education programs in the reporting year.</p> <p><u>Denominator:</u></p> <p>Number of students who participated in a non-traditional secondary occupational vocational education program in the reporting year.</p>	<p>Nontraditional students are determined by using a list of occupations that have twenty-five percent (25%) or less of those employed of one gender. The denominator will be total number of vocational participants enrolled (male and female) in courses identified as nontraditional based on the list of non-traditional occupations and corresponding CIP codes provided by the U.S. Department of Education.</p>	<p>Baseline data for nontraditional participation is available, in the aggregate, at the state level. This data is collected as a part of the Core Data and Vocational Education Data System. The data for the baseline is contained in the chart below.</p>	<p>Eight and one half percent (8.5%) of secondary students in underrepresented gender groups will participate in nontraditional occupational vocational education programs.</p>

Secondary Nontraditional	FY1997	FY1998	FY1999	TOTAL
Number Nontraditional M/F	1,631	1,407	1,523	4,561
Total Student - Nontraditional	20,447	20,043	18,249	58,739
Percent Participation	8%	7%	8%	8%

CORE INDICATOR 4 – PARTICIPATION IN AND COMPLETION OF NONTRADITIONAL PROGRAMS			
Sub-Indicator 4S2 – Completion of Secondary Nontraditional Programs			
Measure	Measurement Approach	Baseline Data	Level of Performance
<p><u>Numerator:</u></p> <p>Number of secondary students underrepresented gender groups participating in nontraditional secondary occupational vocational education that complete their vocational programs in the reporting year.</p> <p><u>Denominator:</u></p> <p>Number of secondary students who completed non-traditional secondary occupational vocational education programs in the reporting year.</p>	<p>Nontraditional students are determined by using a list of occupations that have twenty-five percent (25%) or less of those employed of one gender. The denominator will be total number of vocational participants enrolled (male and female) in courses identified as nontraditional based on the list of non-traditional occupations and corresponding CIP codes provided by the U.S. Department of Education. The numerator will be the combined total of both genders completing their vocational program.</p>	<p>Baseline data for secondary nontraditional completion is currently not available. This data will be collected from the eligible local education agencies for the 1999-2000 school year. This data will be used to establish a baseline for nontraditional completion.</p>	<p>Twelve and eight tenths percent (12.8%) of postsecondary students in underrepresented gender groups will participate in nontraditional occupational vocational education programs.</p>

Secondary Nontraditional	FY1997	FY1998	FY1999	TOTAL
Nontraditional Completers M/F	1948	1730	1776	5454
Total Student Nontraditional Program Completers	11542	9929	9842	31313
Percent Participation	17%	18%	18%	18%

CORE INDICATOR 4 – PARTICIPATION IN AND COMPLETION OF NONTRADITIONAL PROGRAMS			
Sub-Indicator 4P1 – Participation in Postsecondary Nontraditional Programs			
Measure	Measurement Approach	Baseline Data	Level of Performance
<p><u>Numerator:</u></p> <p>Number of postsecondary students in underrepresented gender groups participating in nontraditional postsecondary occupational vocational education programs in the reporting year.</p> <p><u>Denominator:</u></p> <p>Number of postsecondary students who participated in a non-traditional secondary occupational vocational education program in the reporting year.</p>	<p>Nontraditional students are determined by using a list of occupations that have twenty-five percent (25%) or less of those employed of one gender. The denominator will be total number of vocational participants enrolled (male and female) in courses identified as nontraditional based on the list of non-traditional occupations and corresponding CIP codes provided by the U.S. Department of Education.</p>	<p>Baseline data for nontraditional participation is available, in the aggregate, at the state level. This data is collected as a part of the Core Data and Vocational Education Data System. The data for the baseline is contained in the chart below.</p>	<p>Eight and three tenths percent (8.3%) of postsecondary students in underrepresented gender groups will participate in nontraditional occupational vocational education programs.</p>

Secondary Nontraditional	FY1997	FY1998	FY1999	TOTAL
Number Nontraditional	4,170	3,565	2,778	10,513
Total Student - Nontraditional	55,683	52,382	39,873	147,938
Percent Participation	9%	7%	7%	7%

CORE INDICATOR 4 – PARTICIPATION IN AND COMPLETION OF NONTRADITIONAL PROGRAMS			
Sub-Indicator 4S2 – Completion of Postsecondary Nontraditional Programs			
Measure	Measurement Approach	Baseline Data	Level of Performance
<p><u>Numerator:</u></p> <p>Number of postsecondary students underrepresented gender groups participating in nontraditional secondary occupational vocational education that complete their vocational programs in the reporting year.</p> <p><u>Denominator:</u></p> <p>Number of postsecondary students who completed non-traditional secondary occupational vocational education programs in the reporting year.</p>	<p>Nontraditional students are determined by using a list of occupations that have twenty-five percent (25%) or less of those employed of one gender. The denominator will be total number of vocational participants enrolled (male and female) in courses identified as nontraditional based on the list of non-traditional occupations and corresponding CIP codes provided by the U.S. Department of Education. The numerator will be the combined total of both genders completing their vocational program.</p>	<p>Baseline data for secondary nontraditional completion is currently not available. This data will be collected from the eligible local education agencies for the 1999-2000 school year. This data will be used to establish a baseline for nontraditional completion.</p>	<p>The percent of postsecondary students in under-represented gender groups participating in nontraditional vocational education that complete their vocational programs in the reporting year will be eight and five tenths percent (8.5%).</p>

Postsecondary Nontraditional	FY1997	FY1998	FY1999	TOTAL
Nontraditional Completers	907	709	763	2379
Total Student Nontraditional Program Completers	5650	4983	4984	15617
Percent Participation	16%	15%	16%	16%

7. Identify and describe any additional indicators identified by the eligible agency. [Sec. 113(b)(2)(B)].

No additional indicators of performance have been identified by the State of Missouri.

8. Identify and describe a State level of performance for each additional indicator. [Sec. 113(b)(3)(B)].

No additional indicators of performance, nor levels of performance, have been identified by the State of Missouri.

9. Describe how you will annually evaluate the effectiveness of vocational and technical education programs, and describe, to the extent practicable, how the eligible agency is coordinating such programs to ensure nonduplication with other existing Federal programs. [Sec. 122(c)(6)].

Secondary:

The State of Missouri has relied primarily on the use of the Missouri School Improvement Program (MSIP) to evaluate the effectiveness of vocational education programs. Beginning in 1990, the State has reviewed the resources, process and performance of every public elementary and secondary school district. The State ensured non-duplication of on-site evaluations and collection of data, by including as an integral part of MSIP, those standards pertaining to vocational education. The school districts must meet a set of rigorous standards that include general education requirements as well as standards that pertain specifically to vocational education. A copy of these standards and their corresponding indicators of performance are included as Appendix P. School districts undergo the MSIP review on a five-year cycle and receive a level of accreditation based on the review. The levels of accreditation are accredited, provisionally accredited and unaccredited. Each school district must provide a written Comprehensive School Improvement Plan that addresses the specific major areas of concern derived from the review. This strategic plan must also include long-range plans for total school improvement.

Vocational education programs are reviewed in the following areas: (1) the number of vocational programs offered to students in the district's program of studies; (2) verification that the actual vocational education program enrollment and services provided are an integral part of the district's total program of studies; (3) an assurance that all curriculum for vocational education is competency-based and includes an instructional management system; (4) verification that local vocational education programs are annually evaluated based on a written plan for program improvement; (5) verification that the district includes career and technical student organizations as a part of their intra-curricular programming; and (6) and assurance that vocational education curriculum is cross-referenced to the State-adopted Show-me Standards.

Secondary school districts will also be evaluated based on the performance of students. Performance will be measured based on the four Perkins III core indicators of performance and state levels of performance. The state will annually collect specific, district data for the performance measures and compare this data to the statewide levels of performance. Those districts not performing at the state-established levels of performance will be required, as a part

of their annual report to the State, to indicate what measures they will take to improve performance. All reports and data submitted by secondary school districts will be in terms of students who have earned one or more vocational education credits and students who have demonstrated concentration in vocational education by completing two or more vocational credits.

Postsecondary:

Postsecondary institutions will also be evaluated based on the four core indicators and levels of performance indicated under Perkins III. In order to avoid duplication, postsecondary institutions may submit the same report for new or expanded programs to both the Department of Higher Education and the Department of Elementary and Secondary Education.

Postsecondary institutions must undergo a review by a national accrediting agency to ensure the quality of vocational and academic programming. These institutions must also meet requirements established by the Missouri Coordinating Board for Higher Education.

10. Describe how the State will report data relating to students participating in vocational and technical education in order to adequately measure the progress of students, including special populations. [Sec. 122 (c)(12)].

The Missouri Department of Elementary and Secondary Education, Division of Vocational and Adult Education will be responsible for reporting all data relevant to the progress of students participating in vocational education to the U.S. Department of Education. This data will be collected from local program providers through existing data reporting systems such as Core Data, Vocational Education Data System (VEDS), CTB McGraw-Hill (MAP data) and through school reports submitted through specific reporting instruments or as a part of the eligible recipient's annual report. This school data will then be aggregated to form a statewide report based on the performance measures previously established and will be included in the Perkins III Annual Performance Report. Each report will indicate a baseline of data that is or will be established for each performance measure and progress will be measured in comparison to this baseline until sufficient historical data is available. Special populations will be reported in the same manner as other data. Special populations data will be collected and reported for each of the indicators of performance. Much of the special populations data is not currently collected through existing reporting systems.

New methods of collecting and reporting data will be devised in order to accurately report the progress of these groups. Much of the data generated from the performance measures will be included in presentations to the State Board of Education, legislative committees, community organizations, the Missouri Training and Employment Council (MTEC), and other interested citizens.

11. Describe how the State will ensure data reported from local education agencies and eligible institutions under Perkins III and the data reported to the Secretary are complete, accurate and reliable. [Sec. 122(c) (20)].

The State will make every effort to ensure the data collected through statewide reporting systems and through local data collection systems are complete, accurate and reliable. Each local education agency or eligible institution will be required to provide an assurance that data

reported through these systems meets the state-established reporting requirements. Where possible, all data will be cross-referenced to other existing data systems to ensure accuracy. Where applicable, data will be compared to existing historical data to ensure it is within established levels. The new data collection systems being developed will be closely examined to ensure that the methodology used in collection, analysis and reporting are accurate.

12. As required by Sec. 112(b)(8)(B) of the Workforce Investment Act of 1998, describe the common data collection and reporting processes used for the programs and activities described in Sect. 112(b)(8)(A)(iii) of the Workforce Investment Act of 1998, and to postsecondary vocational education activities. [Sec. 122(c)(21)].

The Department of Elementary and Secondary Education is currently participating in state level discussions regarding the implementation of the Workforce Investment Act of 1998.

The Assistant Commissioner for Vocational Rehabilitation currently serves on the State Workforce Investment Board. The staff of the Department of Economic Development that coordinate the Workforce Investment Act for Missouri and the staff of the Department of Elementary and Secondary Education hold regular meetings to ensure coordination of efforts that include collection, analysis and reporting of common data elements. In addition to meetings regarding the core indicators of federal workforce development programs, state agencies are also being held responsible for the four outcome measures designed to ensure state agencies cooperate in all aspects of the Carl D. Perkins Vocational and Technical Education Act of 1998 and the Workforce Investment Act of 1998. The four (4) outcome measures for individuals receiving services from the Missouri Workforce Development System are:

- get a job;
- get higher earnings;
- get out of poverty; and
- keep a job for twelve months.

Quarterly unemployment records are used to evaluate success on the four (4) measures. (See Appendix E for Interagency Agreement for an Analysis of the Workforce Development System).

All data collected and reported under the Carl D. Perkins Vocational and Technical Education Act of 1998 will be made available to the agencies implementing the Workforce Investment Act of 1998 and other Federal programs that require education related information consistent with the reporting requirements for their implementation.

Local education agencies and eligible institutions are coordinating efforts with local Workforce Investment Boards to ensure that data collection is consistent and derived from common sources to ensure accuracy and completeness.

DEFINITIONS OF VOCATIONAL EDUCATION POPULATIONS IN MISSOURI

Secondary Threshold – Vocational education students enrolled in a state approved occupational vocational education program and earning a minimum of two (2) units of vocational education credits prior to exiting secondary education.

Postsecondary Threshold – Vocational education students completing a postsecondary vocational education program that is a minimum of five-hundred (500) clock hours in length or earns twenty-one credit hours of college credit prior to exiting the postsecondary program.

Vocational Education Participant – A student enrolled in at least one State-approved occupational vocational education program.

Vocational Education Concentrator – A vocational education participant meeting the threshold and provided the opportunity to gain the academic and technical knowledge, skills or proficiencies to prepare the student for employment or advanced education.

Vocational Education Completer – A vocational education concentrator who attains the academic and technical knowledge, skills or proficiencies to prepare the student for employment or advanced education and graduates from high school or attains a high school equivalency, receives a certificate of completion or earns a degree.